

Woodstock Water Quality Report for 2008

Introduction:

Starting in 1999 Operators of Community Water Supplies are required to prepare and distribute an Annual Consumer Confidence Report (CCR). The CCR must contain information about the source of the water and its quality. The EPA published the final CCR Rule on August 19, 1998 that established the requirements for the content, format and distribution of this report..

System Information:

Public Water System Identification number: 00300-12

State Appropriation permit number BA926022(01)

Source Water type: Ground

Plant Operator: Carl Smith, License number 1770, Class 5

Regulatory Oversight:

The Maryland Department of the Environment, The Department of Health and Mental Hygiene, and The EPA all maintain oversight of this facility. We work closely with these agencies to safeguard the quality of the drinking water..

Water Source:

Water is supplied by two wells located on the center which is part of the Patapsco Valley Watershed. This facility used more than 12 million gallons of water from these two wells in 2008 and we must take steps to lower our water consumption. Additionally you may have noticed water being trucked onto the center from time to time. In the event of a well failure we may use tanker trucks to maintain our supply. This water comes from Baltimore City Municipal Water Supply and meets all drinking water standards.

Violations:

The water facility was cited in 2008 for a violation of the MC/L for radium. The facility made public notification of this violation which included ways to lessen your exposure to this contaminant. The problem was quickly corrected and our water is currently within the MC/L for radium.



Water Treatment:

The following is an overview of the treatment methods used at this facility. Water is pumped from the wells through a 10 micron filter and into the Ion Exchange Unit. From here it moves to a flow meter then into a 7,000 gallon pre-storage tank. As needed, the water is pumped into the elevated storage tower. Between pre-storage and elevated storage the water is disinfected and a slight adjustment is made in the P/H. (acidity/alkalinity) Once in elevated storage the water is ready for use. In 2008, point of use filtration was installed on all hot and cold water lines. We believe this has made a significant improvement in the quality of our finished water.

Disinfection:

Disinfection is an important step in ensuring that water is safe to drink. Water systems add disinfectants to destroy microorganisms that can cause disease in humans. The surface water treatment rule requires public water systems to disinfect water obtained from surface water supplies or ground water under the influence of surface water. This water system uses a sodium hypochlorite solution to disinfect our drinking water. Once again, disinfection is required by law and does not reflect in any way on the quality of our source water.

Chemical Additives:

1. Sodium Hypochlorite, liquid chlorine, this widely used method of disinfection is required by law and does not reflect on the quality of the source water.
2. Soda Ash, food grade, used to raise the P/H (acidity/alkalinity) of the drinking water. This is done to minimize the effects of corrosion in the distribution system.
3. Sodium Chloride, used to regenerate the exchange medium in the Ion Exchange Unit. This can result in a higher than normal Sodium content in the water which may be unacceptable to individuals on Sodium restricted diets. These effects can be minimized by using the bottled water that is provided in all areas.



Definitions:

The following definitions may be helpful in reading the following table.

- (1) Maximum Contaminant Level (MC/L) is the highest level of a contaminant allowed in drinking water.
- (2) Action Level (AL) is the threshold at which the facility must take some action to lessen the exposure to a certain contaminant.

As the following table indicates the water system violated the MC/L for Radium. The problem was immediately corrected and public notification was made.

Health Effects of exposure to Radium 226/228 in drinking water.

Some people who drink water containing radium 226/228 in excess of the MC/L over many years may have an increased risk of getting cancer.

Additional Educational Information:

The sources of drinking water, both tap and bottled, includes rivers, streams, lakes, ponds, reservoirs, and wells. As water travels over the surface or through the ground it dissolves naturally occurring minerals, and in some cases radioactive material. It can also pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in the source water include:

- 1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic tanks, livestock and wildlife..
- 2) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from storm water runoff. Wastewater discharge, oil and gas production, mining or farming.
- 3) Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 4) Radioactive contaminants which may be naturally occurring or be the result of oil and gas production, or mining activity.



Drinking water, including bottled water , may be reasonably expected to contain at least small amounts of these and other contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno compromised persons such as though with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS, infants and some elderly can be particularly at risk. These people should seek advice from their healthcare provider on appropriate ways to lessen their risk of infection.

Woodstock Job Corps Center is required to monitor for various contaminants in our drinking water. The following table shows our most recent results for those contaminants.. In this table you may find terms and abbreviations you are not familiar with. To help you we have provide the following definitions.

- 1) Parts per million (ppm) – one part per million is equal to one minute in two years, or a single penny in 10,000 dollars.
- 2) Parts per billion (ppb) - one part per billion is equal to one minute in 2,000 years, or a single penny in 10 million dollars.
- 3) Picocuries per liter (pci/L) – a measure of radioactivity in water.
- 4) Maximum contaminant level (MCL) – the highest level of a contaminant that is allowed in drinking water.

Should you have any questions with regard to this report or to the water quality at this facility, you can contact me at ext. 9399. Any information pertaining to the water plant is available upon request.

Earl Smith



TEST RESULTS FOR WOODSTOCK						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Alpha emitters ,adjusted (average)	N	11.5	pCi/l	0	15	Erosion of natural deposits
Beta/photon emitters (average)	N	11.3	pCi/l	0	50	Decay of natural and man-made deposits
Combined Radium 226 / 228	Y	8.1	pCi/L	0	5	Erosion of natural deposits
Inorganic Contaminants						
Fluoride	N	< 0.1	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	2.4	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper (2006) (distribution)	N	0.26	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2006) (distribution)	N	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides						
Di(2-ethylhexyl) phthalate	N	0.9	ppb	0	6	Discharge from rubber and chemical factories
Volatile Organic Contaminants						
TTHM (distribution) [Total trihalomethanes]	N	9.74	ppb	0	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids] (distribution)	N	2.35	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Sodium	N	35.6	ppm	N/A	N/A	Erosion of natural deposits
Zinc	N	0.04	ppm	N/A	N/A	Erosion of natural deposits
Bromoform	N	2.1	ppb	N/A	N/A	By-product of drinking water chlorination
Bromodichloromethane	N	2.7	ppb	N/A	N/A	By-product of drinking water chlorination
Dibromochloromethane	N	3.6	ppb	N/A	N/A	By-product of drinking water chlorination
Sulfate	N	25	ppm	N/A	N/A	Erosion of natural deposits

Note: Test results are for year 2008 or as otherwise noted; not all contaminants are tested for on an annual basis.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Woodstock Job Corp is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

NOTE: As can be seen by results listed in the above tables, lead, which is tested for triennial (every 3 years) in accordance with Federal and State regulations in Woodstock Job Corp's distribution system, was not detected in our most recently collected samples.

